

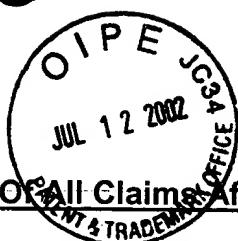
MARKED-UP CLAIMS

11. (Amended) A compound according to claim [10] 1, wherein the adjacent substituents are in the 2-position and the 3-position of the phenylene residue.
16. (Amended) A method according to claim 14 [claim], wherein the base is potassium tertiary butoxide.

FINNEGAN
HENDERSON
FARABOW
GARRETT &
DUNNER LLP

1300 I Street, NW
Washington, DC 20005
202.408.4000
Fax 202.408.4400
www.finnegan.com

08513.7023

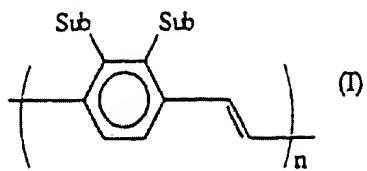


July 11, 2002

Clean Copy Of All Claims After Amendment of July 11, 2002

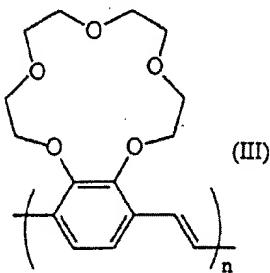
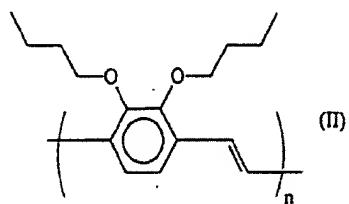
1. A compound comprising a soluble, film-forming conjugated poly(1,4-arylene vinylene) compound having a 1,4-phenylene vinylene unit with adjacent substituents, said substituents being oriented such as to affect the electronic structure of the compound sufficiently to cause a blue-shift in the photoluminescence and/or electroluminescence of the compound.
2. A compound according to claim 1, wherein the substituents are independently selected from:
 - (i) R-, RO-, RS-, and RR'N-
wherein R and R' are independently: a straight or branched chain alkyl group, alkenyl group, or alkynyl group having 1-10 carbon atoms; an aryl group; or an aromatic or non-aromatic heterocyclic group; and
 - (ii) a group in which the adjacent substituents together form a cyclic group, the cyclic group containing, in addition to the two carbon atoms of the arylene unit to which it is attached, 1-10 carbon atoms and 0 or 1-6 hetero atoms selected from O, S and N.
3. A compound according to claim 2, wherein the cyclic group contains 2-6 hetero atoms.

4. A compound according to claim 1, wherein one or both of the adjacent substituents are independently selected from a branched alkyl group and a branched alkoxy group.
5. A compound according to claim 1, wherein each of the carbon atoms at the adjacent substituted positions of the aryl unit is attached to its substituent via a hetero atom, selected from O, S or N.
6. A compound according to claim 1, wherein the substituents are solubilising substituents.
7. A compound according to claim 1, wherein one or both of the adjacent substituents are independently selected from butyloxy, ethylhexyloxy and 3',7-dimethyloctyloxy groups.
9. A compound according to claim 1, wherein the poly(arylene vinylene) is a copolymer comprising a fluorescent unit carrying a distyryl-2,3-substituted-benzene fragment.
11. A compound according to claim 1, wherein the adjacent substituents are in the 2-position and the 3-position of the phenylene residue.
12. A compound according to claim 11, of formula (1):



wherein Sub is a substituent as defined in claim 1, the vinylene unit may be a trans vinylene unit or a cis vinylene unit, and n is the number of units of the formula in the polymer.

13. A compound according to claim 11, of formula (II) or formula (III):



wherein the vinylene unit may be a trans vinylene unit or a cis vinylene unit, and n is the number of units of the respective formula in the polymer.

14. A method for the production of a compound as defined in claim 1, which method comprises polymerising a bis(halomethyl) substituted phenyl monomer in the presence

of a base to form a poly(arylene vinylene), wherein the phenyl monomer has adjacent substituents on the phenyl residue.

15. A method according to claim 14, wherein the monomer is a bis(chloromethyl), bis(bromomethyl) or bis(iodomethyl) monomer.
16. A method according to claim 14, wherein the base is potassium tertiary butoxide.
17. A component or device comprising a compound as defined in claim 1.
18. A component or device according to claim 17, further comprising an electric, electronic, optical or optoelectronic component or device.
19. A component or device according to claim 17, which is a photoluminescent or electroluminescent component or device.
20. A light emitting diode comprising a component or device as defined in claim 17.
21. A method for producing a component or device, which method comprises coating a solution of a compound as defined in claim 1 onto a substrate to form a film.
22. A method according to claim 21, wherein the substrate is ITO.

23. A method according to claim 21, wherein the solution is a chloroform solution.
24. A method according to claim 21, wherein the solution is spin-coated onto the substrate.

30. A light emitting diode having a coating of a compound according to claim 1.
31. An electric, electronic, optical or optoelectronic component or device having a coating comprising a soluble, film-forming conjugated poly(1,4-arylene vinylene) compound having a 1,4-phenylene vinylene unit with adjacent substituents which produces blue-shifted electroluminescence or photoluminescence.